

7. Sakshi

Program Name: Sakshi.java

Input File: sakshi.dat

After completing a recent math class study unit on powers, Sakshi is experimenting with various bases and exponents to make powers, and needs your help writing a program for her research. For example, when she uses the base value 10 and exponent 2, she gets the value 100, and for 100 and 0.5, the result is 10, since 0.5 is the exponent that gives the square root of a value. But she is also interested in other values for bases and exponents, and is curious what powers they produce.

Input - Several pairs of non-negative real numbers, each pair on one line, representing the base and exponent of a power P. All data values will be no greater than 10,000.

Output - The resulting value P, shown rounded to a precision of three decimal places. A tolerance of ± 0.001 will be accepted. All output values are guaranteed to be within range of standard data types.

Sample data:

```
10 2
100 .5
4.5 3
1.1 5
```

Sample Output:

```
100.000
10.000
91.125
1.611
```